

## ABSTRACT OF THE DISCLOSURE

Disclosed herein is a via hole dry etching method using an organic SOG film as an interlayer dielectric having low-K. In the dry etching method, a mixed gas containing at least C<sub>4</sub>F<sub>8</sub> and O<sub>2</sub> is used as an etching gas and an O<sub>2</sub>/(C<sub>4</sub>F<sub>8</sub>+O<sub>2</sub>) mixture ratio is set to 50% or less, thereby to carry out via hole dry etching. Further, the via hole dry etching is carried out by using a mixed gas containing at least CF<sub>4</sub>, CHF<sub>3</sub> and N<sub>2</sub> and setting the quantity of flow of N<sub>2</sub> to above 10% and below 80% of the quantity of flow of CF<sub>4</sub>+CHF<sub>3</sub>+N<sub>2</sub>.